

ABSTRACT OF THE INVENTION

A manufacturing method of a semiconductor substrate provided with a through hole electrode is proposed. In accordance with the methods, it is

5 possible to effectively form a through hole electrode in a semiconductor substrate in which a device and a wiring pattern have been already fabricated.

This manufacturing method includes the steps of forming a first silicon oxide film 12 on a principal surface of the semiconductor substrate 11, forming a small hole 13 through the semiconductor substrate 11 from the opposite the step to

10 reach to the first silicon oxide film 12, covering the inside of the small hole 13 with the second silicon oxide film 14, forming a first thin metal film 15 and a second thin metal film 16 on the first silicon oxide film 12, partially removing the first silicon oxide film 12 corresponding to the end of the small hole 13, and filling the small hole 13 with the conductive material to form a through hole

15 electrode 17.